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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,295	03/25/2004	Katsu Hattori	000409-102	5632
21839 7590 05/16/2006 BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER NGUYEN, THU V	
			ART UNIT 3661	PAPER NUMBER

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,295	HATTORI ET AL.	
	Examiner	Art Unit	
	Thu Nguyen	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The response to the restriction requirement filed on March 2, 2006 is acknowledged. By this response, the species group 3 (including claims 5-8) has been elected with traverse. Upon considering applicant's argument, the examiner decides to maintain the restriction requirement (refer to section "response to argument" below), accordingly, claims 5-8 are examined in this office action.

Specification

1. The "brief description of the drawing figures" in page 6, line 6 does not disclose the fig.8d.

Claim Objections

2. Claim 8 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 6. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The claimed language in lines 5-17 is ambiguous, and it is not possible to comprehend the meter and bound of the claimed limitation. Specifically:

- i. In lines 5-6, “calculating a total partial pressure in rows” is ambiguous because it is not clear if the total partial pressure in rows is the total pressure of measured by pressure sensors in “several” rows, or if it is the total pressure measured by individuals pressure sensor in “each” row.
- ii. In line 6, and line10, the claimed “in a predetermined number” is ambiguous. It is not clear if this limitation means in a predetermined number of “rows”, or in a predetermined number of “columns”.
- iii. In line 10, the claimed “and having the maximum total” causes the claimed limitation in lines 8-10 ambiguous because, there should be only one row that has “maximum” total pressure. It is not clear how the lateral width calculating means calculate the total of the partial pressures of cells per “column” using the only one maximum total (calculated from the peak row detecting means) (when there is only one maximum total row, there is only one cell of the row in each column).
- iv. In line 18, the claimed “a temperature sensor for detecting temperature” is ambiguous. It is not clear what temperature the sensor should detect. Is it the temperature of the person? Or is it the temperature of the

environment inside the vehicle? Or is it the temperature of the pressure sensors?

- v. In line 20, the claimed 'lateral width' is ambiguous, because it appears that the "lateral width" is the "number" of columns that have the total pressure exceed a predetermined threshold, it is not clear why the "number" of the columns be adjusted based on the temperature.
- b. In claim 7, lines 4-5, the claimed "being set at a position off by the deviation" is ambiguous. The width threshold seems to be a numerical value, how could a "number" be set with respect to a "position". Also it is not clear from "which location" the position should be off.
- c. Claims 6 and 8 are rejected as being dependent on the rejected base claim.

The claimed language seems to be a direct translation of a foreign document. The applicant is suggested to carefully review the claims and to amend the claims in a clear and concise manner in conformance with the current US practice.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace (US 6,609,054) in view of Hiroaki (JP 2003-014564) (enclosed IDS).

As per claim 5, 7, Wallace teaches an occupant detecting device comprising: a plural cells for detecting partial pressures (col.9, lines 23-27, lines 48-52); a peak row detection means for calculating a total partial pressure in rows (col.28, lines 50-67; col.29, lines 1-10); a lateral width calculating means for calculating total partial pressure in column (col.33, lines 30-40) with thresholds values (col.38, lines 5-15). Wallace does not explicitly disclose a temperature sensor with correcting means. However, Wallace suggest correcting the sensor data due to environment factors (col.11, lines 30-36), and Hiroaki suggests detecting temperature and correcting the sensor data (para 0045, 0051), further, since Hiroaki teaches correcting the sensor data, Hiroaki obviously encompasses suggesting the correction of the detected temperature obtained in lateral width as well. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the temperature sensor to the pressure sensor taught by Wallace in order to provide calibration to the measured sensor data based on the change of temperature to enhance accuracy in recognizing the size of the occupant.

As per claim 6, 8, Wallace teaches adjusting the thresholds (col.38, lines 5-29), in view of the teaching of Hiroaki, adjusting the thresholds instead of adjusting the measured data from the sensors according to the change of the temperature would have been obvious matter of design choice.

7. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsu (JP 2002-087132) (enclosed IDS).

As per claim 5-8, Katsu teaches an occupant detecting device comprising: a plural cells 10 (fig.1), a peak row detecting means and a lateral width calculating means (abstract, para 0047, 0052-0053) Katsu also disclose correcting the data from the sensors based on the detected temperature (para 0044). Katsu does not explicitly disclose correcting the lateral width based on the temperature. However, since Katsu teaches correcting the measured data of the sensor based on the temperature (para 0044), Katsu obviously encompasses teaching correcting the data in the lateral width when each data within the lateral width is corrected. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to correct the total pressure in the lateral width instead of correcting individual data from each sensor in order to improve processing speed. Moreover, with respect to claims 6 and 8, adjusting the thresholds instead of adjusting the measured data would have been known and obvious matter of design choice.

Response to Arguments

8. Applicant's election with traverse of species 3 in the reply filed on March 2, 2006 is acknowledged. The traversal is on the ground(s) that the species 1-2, and 4 are in fact just presented in different scope of the same subject matter and no serious burden search for examining all the species. This is not found persuasive because the drawing figs.9-11 appear to disclose different species that read on the claimed language in claims 1-8, and the specification page 23-24 appears to disclose a feature that read on the claimed language of claims 9-10. The different features disclosed in claims 1, 3, 5 and 9 requires different searches and this imposes serious burden to the examiner. To ensure examining quality, the claims should be restricted as previously proposed by the examiner.

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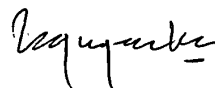
The requirement is still deemed proper and is therefore made FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 14, 2006


THU V. NGUYEN
PRIMARY EXAMINER